

WHAT IS CLAIMED IS:

1. A method of treating a surface of a substrate, said method comprising the following steps of:

5       (a) forming bubbles with a liquid and a gas on the surface of the substrate; and

            (b) allowing the gas bubbles to ascend along the surface of the substrate such that the gas bubbles work to strip a substance from the surface of the substrate, or that the gas bubbles work to form a substance on the surface of the substrate.

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2. The method as defined in claim 1, wherein the gas bubbles work to strip a substance from the surface of the substrate in the step (b).

15       3. The method as defined in claim 2, wherein the substrate is a wafer; wherein the substance is a photoresist or an organic contaminant on the surface of the wafer.

20       4. The method as defined in claim 2, wherein the substrate is immersed in the liquid contained in a bath such that only a bottom portion of the substrate is immersed in the liquid, and the gas is introduced to the bath to form the bubbles.

25       5. The method as defined in claim 4, wherein the substrate is vertically immersed in the liquid contained in the bath, and the substrate is driven to turn in the bath, thereby enabling outer edges of the substrate to be immersed in the liquid in rotation.

6. The method as defined in claim 5, wherein a plurality of the substrates are equidistantly arranged and are parallel to one another, whereby the substrates are simultaneously treated.

5           7. The method as defined in claim 4, wherein the liquid is pure water, ozone water, or aqueous solution containing chemical substance; wherein the gas is a gas mixture containing ozone, a gas mixture containing a reactive gas, or air.

10          8. The method as defined in claim 7, wherein the liquid is pure water or ozone water.